REMARKS

The remarks which follow are responsive to the office action dated February 24, 2006.

By the present amendment, a minor semantic change has been made to the wording of claim 44 solely for the purpose of clarification. No new matter has been added and no other amendments have been made.

Claims 44-47, 54-56, 59-61 and 64-100 are pending in this application. In the office action, claims 69, 81-85 and 95-100 were allowed as written and claims 44-47, 54-56, 60, 61, 64-68, 76, 77 and 87-94 were rejected under 35 U.S.C. §102(b) as being anticipated by United States Patent No. 5,843,089 (Sahatjian, et al.) "and evidenced by" United States Patent No. 5,514,379 (Wiesslander et al.).

Applicant respectfully traverses the stated rejection on grounds that neither Sahatjian et al. nor Wiesslander et al. describe or even suggest Applicant's invention as presently claimed.

As the Examiner will note, independent claims 44, 77 and 89 each recites a stent apparatus that has, disposed thereon, a reactive material that has a first state of protonation prior to implantation in the body and which undergoes a change to a second state of protonation after implantation in the body, wherein such change in the state of protonation gives rise to expansion of the reactive material resulting, such expansion resulting in a decrease in the size of an opening or fenestration in the stent such that blood flow through that opening or fenestration is lessened. Hydrogels of the prior art do not routinely protonate and deprotonate as recited in Applicant's claims. In this regard, it should be noted that Applicant's specification describes, by way of example, a specific method for manufacturing a hydrogel polymer that *will* undergo protonation when comes in contact with blood at physiological pH and *will then* undergo volumetric expansion, as claimed. Applicant's specification also describes embodiments where the rate of hydrogel

expansion in situ is controlled (e.g., delayed) because the hydrogel must undergo a change in protonation state before undergoing the desired expansion. Neither Sahatjian et al. nor Wiesslander et al. even remotely suggest this type of reactive material as recited in Applicant's claims.

Recognizing that no prior art reference actually discloses Applicant's claimed invention, the Examiner relies heavily on the doctrine of inherency to support the stated rejection over Sahatjian et al. Specifically, the Examiner notes Sahatjian et al. describe stents that have hydrogel liners and goes on to state that Wiesslender evidences that crosslinked hydrogels absorb large amounts of water. On this basis the Examiner concludes that "[s]ince Sahatjian teaches a fenestrated stent lined with a hydrogel, it would be inherent that the fenestration openings will decrease in size once the hydrogels have absorb (sic) water and swell up." Applicant strongly disagrees that such result would be inherent in the devices described by Sahatjian et al. To the contrary, in the example described by Sahatjian et al., an unlined stent is implanted next to an aneurysm and a hydrogel liner is subsequently deposited "proximate" the aneurysm such that it "renders the inner surface of the stent near the aneurysm impermeable." Once this hydrogel mass has been placed "proximate" the aneurysm such that it "renders the inner surface of the stent near the aneurysm impermeable" as required by Sahatjian et al., such hydrogel liner will block blood flow into the aneurysm *regardless* of whether it swells or not. Swelling is not needed to accomplish the desired reduction of blood flow into the aneurysm because the hydrogel mass has already been selectively placed in a position where it "renders the inner surface of the stent near the aneurysm impermeable."

Also in the Office Action, the Examiner surmises that "since Sahatjian discloses a hydrogel composition, it would inherently contain all of the characteristics cited in the claims." There is simply no basis for this broad, sweeping conclusion of inherency. Indeed, even if crosslinked hydrogels do absorb water, there exists no basis to presume that all hydrogels must undergo a change in protonation as recited in Applicant's claims in order to give rise to such expansion. In fact, Applicant has invested substantial effort in the

development of the manufacturing method described in the specification to make a hydrogel that has these claimed properties. The claimed properties of the reactive material are not inherent in any hydrogels of the prior art and neither Sahatjian et al. nor Wiesslander et al. describe any way in which a hydrogel of the prior art could be modified to exhibit such properties.

Accordingly, withdrawal of the stated grounds for rejection and allowance of all claims 44-47, 54-56, 60, 61, 64-69, 76, 77 and 87-100 is earnestly solicited.

Additionally, the Examiner is respectfully requested to note that a Notification of Loss of Entitlement to Small Entity Status is filed herewith.

The Examiner is invited to telephone Applicant's undersigned counsel to discuss any further measures that may be taken to expedite issuance of a Notice of Allowance in this case.

Respectfully submitted,

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